

### **REMARKS**

Claims 1 -29 are currently pending in the subject application and are presently under consideration. Claims 1, 3, 5, 6, 8, 11-13, 15, 16, 19, 20-22, 23, and 24-29 have been amended as shown at pages 4-8 of this Reply. In addition, the specification has been amended as indicated on pages 2-3.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Rejection of Claims 19-21 Under 35 U.S.C. § 101**

Claims 19-21 stand rejected under 35 U.S.C. § 101 on grounds that the subject claims are directed to non-statutory subject matter. It is requested that the rejection be withdrawn for at least the following reasons. The subject claims recite features that, as a whole, can be reduced to a practical application and are capable of producing useful, concrete, and tangible results. Therefore, the instant claims are within the bounds of statutory subject matter in compliance with 35 U.S.C. § 101.

Title 35, section 101, explains that an invention includes "any new and useful process, machine, manufacture or composition of matter."... Without question, ***software code alone qualifies as an invention eligible for patenting under these categories. Eolas Techs., Inc. v. Microsoft Corp.***, 399 F.3d 1325, 1338-39 (Fed. Cir. 2005) (holding that 35 U.S.C. §101 did not limit inventions or components of an invention to structural or physical components (e.g., non-software components). ***Rather, every component, including software components, of every form of invention deserves the protection of §271(f) because it is patentable subject matter under 35 U.S.C. § 101.***

In the subject application, claim 19 (and similarly claims 20 and 21 that depend there upon), as amended, recites functional descriptive material recorded on a computer-readable medium and thus is in accord with 35 U.S.C. § 101. In particular, independent claim 19, as amended, recites: A ***computer-readable medium*** for storing data for access by an application program being executed on a page indexing system, comprising: a ***data structure stored in said medium***, the data structure comprising ***a first data field***

*comprising reference information* associated with a page, the reference information comprising descriptive information; and *a second data field comprising the page*.

Claim 19 is directed to a data structure recorded on a computer-readable medium. The data structure can include a first data field that comprises reference information associated with a page. The reference information can be functionally descriptive material, as it is data that can be used in, and therefore functionally interrelates with, an application program being executed as part of a page indexing system. Further, the second data field comprises the page. The page is functionally descriptive material as it can functionally interrelate with the application program.

Based on the foregoing, independent claim 19 (and associated dependent claims 20 and 21) recites subject matter that, as a whole, has been reduced to a practical application that is useful, concrete, and tangible, *e.g.*, it increases computer efficiency. *See Lowry, supra*. It is believed that the claims 19-21 are in condition for allowance, and this rejection of these claims should be withdrawn.

## **II. Rejection of Claims 1-29 Under 35 U.S.C. § 102(b)**

Claims 1-29 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kim, *et al.* (Pub No. US 2002/0129014). This rejection should be withdrawn for at least the following reasons. Kim, *et al.* does not disclose each and every element of the subject claims.

For a prior art reference to anticipate, 35 U.S.C. § 102 requires that “*each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (*quoting Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)) (emphasis added).

The claimed subject matter generally relates to facilitating page indexing by employing reference information associated with a particular page. More particularly, the claimed invention relates to storing reference information, including descriptive information and anchor text, associated with a page, and providing this associated

information along with the page to, for example, an index building system. For example, the subject invention can include a page index system having a page data store and a crawler component. The page data store can store reference information associated with a page. The crawler component can fetch the page and retrieve the reference information associated with the page from the page data store. The reference information and the page can then be merged and provided to an index building system. As a result, reference information found in link(s) to a page (*e.g.*, anchor text) as well as nearby words/text (*e.g.*, descriptive information) can be included in the index of words associated with the page available to be keyword searched, with minimal machine cost. Thus, the system can facilitate indexing of pages based, at least in part, upon reference information associated with each of the pages. In particular, independent claim 1 (and similarly independent claims 8, 15, 19, 22, and 26) recites: ***a page data store that stores reference information*** associated with a page, ***the reference information comprising descriptive information;*** and ***a crawler component that . . . provides the page and the reference information to at least an index building component.*** Kim, *et al.* fails to disclose such distinctive aspects of the claimed invention.

Rather, Kim, *et al.* discloses a search engine and a method to produce relevant results to keyword queries. The search engine includes a crawler that fetches pages from the web and stores the pages in a web page database. (*See* p. 2, ¶ 0023). The crawler also sends the pages to a link extractor, which finds the outgoing links in the pages and sends the source and destination URLs of the links to an URL management system. (*See* p. 2, ¶ 0024). If a new URL is found, it is sent back to the crawler to be written into the web page database. (*See* p. 2, ¶ 0024). The search engine also provides an indexing function wherein an indexer extracts the anchor text from the anchor text and link database, parses the keywords from the web page database, and generates an indexed database. (*See* p. 3, ¶ 0025).

Unlike the claimed subject matter, Kim, *et al.* fails to disclose ***a page data store that stores reference information, comprising descriptive information***, associated with a target page, obtained from one or more source pages that referenced the target page. While Kim, *et al.* discloses extracting anchor text from a source page, it is silent regarding extracting ***descriptive information and other reference information associated***

*with the target page* from the source page and *storing this reference information in a page data store*. Rather, Kim, *et al.* discloses determining the rank (*e.g.*, for purposes of relevancy) of a page by looking for a keyword in the anchor text, or in content related to or in the vicinity of the anchor text. (See p. 3, ¶ [0033]). Such content, however, is *not* stored in a page data store. Instead, the ranker reviews the content of the page to determine if and where the keyword appears in the page, and then makes a ranking determination based on where the keyword appears. (See p. 3, ¶¶ [0031]-[0033]). Further, the ranker reviews the content related to or in the vicinity of the anchor text and bases its rank on the relation of such content to the anchor text, *not* the target page; the ranker does *not* look for, nor does it *store*, such content based on an association between such content and the target page. (See p. 3, ¶ [0033]).

In contrast, the claimed subject matter can include a page data store that stores *descriptive information and other reference information associated with a target page* and obtained from a source page. The descriptive information can include information associated with the target page that can be situated near anchor text, where the anchor text can be, for example, the text that appears in the hyperlink.

Further, unlike the claimed subject matter, Kim, *et al.* fails to disclose *providing the page and the reference information to an index building component*. Rather, Kim, *et al.* provides that an indexer extracts anchor text from the anchor text and link database, parses the keywords from the web page database, and generates an indexed database. (See p. 3, ¶ 0025). The indexer stores keywords and associated URL identification numbers for retrieval. (*Id.*) Thus, the page and associated reference information (*e.g.*, descriptive information) are not provided to the indexer.

Instead, Kim, *et al.* provides that the anchor text be analyzed by a ranker function which utilizes the anchor text to determine an anchor weight to be given to the link associated with the anchor text, so ultimately a relevance rank can be given to the page associated with the anchor text. (See p. 3, ¶¶ 0025-0026, 0028, 0033). Unlike the claimed invention, Kim, *et al.* fails to disclose that the anchor text, and other reference information (*e.g.*, descriptive information), are merged with the target page and provided directly to an index building system, so that the reference information retrieved from the source page is available, along with the text of the target page, to be searched when a

keyword search is performed. Rather, Kim, *et al.* provides that “[t]he indexer stores each keyword and its associated list of URL identification numbers . . . .” (*See* p. 3, ¶ 0025). Accordingly, Kim, *et al.* does not teach or suggest a component that provides an output, comprising *the target page merged with the reference information associated with the target page*, to an index building system.

In contrast, the claimed subject matter can also include a component that provides an output, comprising the target page merged with the reference information associated with the target page, to an index building system. As a result, both the page and the associated reference information can be included in the index of words, so the words of the page and the reference information are available to be examined when a keyword search is performed.

In view of at least the foregoing, it is readily apparent that Kim, *et al.* does not disclose each and every element of the claimed invention, as recited in independent claims 1, 8, 15, 19, 22, and 26 as well as all associated dependent claims. Accordingly, it is believed the subject claims are in condition for allowance, and this rejection should be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063[MSFTP512US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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